grade B processing plant, a grade A permit is required for that receiving station or transfer station.

(b) A grade A dairy plant permit expires on April 30 annually and is not transferable between persons or locations. A grade A dairy plant permit may be issued in the form of an endorsement on a dairy plant license under sub. (1).

(15) GRADE A PERMIT EXEMPTIONS. A grade A permit is not required, under sub. (14), for any of the following:

(a) A grade A receiving station or transfer station operated at the same location, and by the same person, as a grade A processing plant covered by a permit under sub. (14).

(b) A grade A transfer station operated at the same location, and by the same person, as a grade A receiving station covered by a permit under sub. (14).

(16) GRADE A PERMIT APPLICATION. An application for a grade A dairy plant permit shall be made on a form provided by the department. A grade A permit application may be made in conjunction with a dairy plant license application under s. ATCP 65.04 (2).

(17) SURCHARGE FOR OPERATING WITHOUT A GRADE A PERMIT. An applicant for a grade A dairy plant permit shall pay a permit surcharge of $100 if the department determines that, within 365 days before submitting the permit application, the applicant operated the dairy plant as a grade A dairy plant without a grade A permit in violation of sub. (14). Payment of the surcharge does not relieve the applicant of any other civil or criminal liability that results from the operation of a grade A dairy plant without a grade A permit, but does not constitute evidence of any violation of law.

(18) ACTION ON GRADE A PERMIT APPLICATION; DEADLINE. The department shall grant or deny a permit application, under sub. (16), within 40 days after the department receives a

complete application or before the expiration of any temporary permit issued under sub. (19), whichever occurs later.

(19) TEMPORARY GRADE A PERMIT. The department may issue a temporary grade A permit to an applicant, under sub. (16), pending final action on that person's permit application. A temporary permit may be issued for a period of not more than 40 days and may not exceed the term of the dairy plant license or temporary license. If the department denies a permit application before the term of the temporary permit expires, the temporary permit is automatically terminated when the applicant receives notice of the denial. The department may not issue a temporary permit in response to a permit renewal application by the holder of an existing permit.

(20) PREREQUISITES FOR GRADE A PERMIT. The department may not issue or renew a grade A dairy plant permit, or issue a temporary permit under sub. (19), unless all of the following conditions are met:

(a) The permit applicant holds a dairy plant license under s. ATCP 65.04 or the department issues the permit and license simultaneously. The department may issue a temporary grade A permit, under sub. (19), to an applicant holding a temporary dairy plant license under s. ATCP 65.04 (5) or may issue the temporary permit and temporary license simultaneously.

(b) The division inspects the dairy plant if the dairy plant is not currently covered by a grade A dairy plant permit.

(c) The applicant pays any surcharge, set forth in a statement from the department, which is due and payable by the applicant under sub. (9). The department shall refund a surcharge paid under protest if the department determines that the surcharge was not due and payable under sub. (9).

(21)GRADE A STANDARDS. A grade A dairy plant shall comply with standards applicable to the receipt, testing, transfer, processing, and distribution of grade A milk and grade A milk products under this chapter. A grade A dairy plant may not receive, transfer, or process grade B milk unless the receipt, transfer, or processing is authorized by the division in writing.

SUBCHAPTER II

DAIRY FARMS

ATCP 65.06 Milking barn or parlor. All milking operations on a dairy farm shall be conducted in a milking barn or parlor, which shall be constructed and maintained in compliance with the following requirements:

(1) FLOORS AND GUTTERS; CONSTRUCTION. Except as authorized by the division in writing, floors, gutters, and gutter covers in milking barns and parlors shall comply with all of the following requirements:

(a) They shall be constructed of concrete or other materials that are equally impervious and cleanable.

(b) They shall be constructed and maintained so they can be kept clean.

(c) They shall be sloped to drain sufficiently to prevent pooling of liquids and shall be free of excessive breaks or worn areas that may allow pooling of liquid wastes. Floors and gutters constructed after July 1, 1989, shall have a slope of at least one inch per 10 feet.

(2) MANURE HANDLING SYSTEMS. Gravity flow manure handling systems and liquid manure storage under milking barns shall comply with applicable standards contained in PMO Appendix C, "Dairy Farm Construction Standards and Milk Production."

Note: Copies of the PMO, including Appendix C, are on file with the division and the legislative reference bureau. Copies are available online at www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/milk.

(3) WALLS AND CEILINGS; CONSTRUCTION. Walls and ceilings in milking barns and parlors shall be constructed and maintained so that they can be kept clean. Walls and ceilings shall be painted, whitewashed or otherwise finished so that they are light colored and easy to clean. Ceilings shall be constructed and maintained to prevent dust and chaff from entering the milking barn or parlor from above. The wall finish and wall cleaning requirements under this subsection do not apply to seasonal milking parlors constructed without walls

(4) LIGHTING. Natural or artificial lighting, or both, shall be provided in milking barns and parlors to ensure illumination that allows evaluation of teat and milking equipment cleanliness for daytime and nighttime milking operations. Except where additional lighting is required for milking parlors under sub. (10), there shall be at least 10 foot-candles of illumination in all working areas where milking operations are being performed.

(5) VENTILATION. Ventilation in milking barns and parlors shall be adequate to prevent visible condensation on walls and ceilings, and to prevent excessive odors.

(6) ANIMALS EXCLUDED. No swine, fowl, or non-milking livestock may be housed in, or allowed to enter a milking barn or parlor. Milking areas shall be kept free of excrement from non-milking livestock.

(7) MAINTENANCE AND CLEANLINESS; GENERAL. The interior of every milking barn or parlor, and all areas used in connection with milking operations, shall be kept clean and in a good state of repair. Floors, gutters, walls, ceilings, animal confinement facilities, pipelines, and equipment shall be kept free of accumulated litter and filth. Bedding material shall be clean and dry. Milk stools, surcingles, and anti-kickers shall be kept clean, and shall be stored above the floor when not in use. Manure shall be removed from milking barns daily, and after every milking in a milking parlor.

(8) FEED STORAGE AND HANDLING. Dust-tight covered containers or separate storage facilities shall be used to store ground, chopped, or concentrated feed. Feed may be stored in the milking portion of the barn only in a manner that does not increase the dust content of the air, attract flies, or interfere with the cleaning of the floor. Open feed dollies or carts may be used for distributing feed, but not for storing feed in the milking barn.

(9) OVERCROWDING PROHIBITED. Areas used for milking operations shall not be overcrowded.

Note: Evidence of overcrowded conditions may include inadequate ventilation, excessive odors, livestock in walks or feed alleys, or non-milking livestock tied between milking animals in a milking line.

(10) MILKING PARLOR; ADDITIONAL REQUIREMENTS. (a) *Cleaning and storage of C-I-P milking equipment.* C-I-P milking equipment may be cleaned, sanitized, and stored in a milking parlor if all of the following conditions are met:

1. There are at least 30 foot-candles of illumination in all areas of the milking parlor where C-I-P milking equipment is cleaned, sanitized, or stored.

2. Doorways to and from the milking parlor are provided with tight-fitting solid doors that are kept closed when the doorways are not in use.

3. Openings to the milking parlor are protected against entry by insects, rodents and other pests.

4. No animals are housed in the milking parlor at any time.

5. Liquid wastes from milking parlor operations are drained and removed in a sanitary manner, so that there are no liquid waste accumulations in the milking parlor.

6. C-I-P milking equipment, if cleaned, sanitized, or stored in the milking parlor, is designed, installed, handled, and stored so that milk contact surfaces are protected from contamination at

all times. Cleaning, handling, and storage shall comply with applicable requirements under s. ATCP 65.14.

(b) *Manual cleaning of milk contact surfaces prohibited in milking parlor.* If manual cleaning of milk contact surfaces is necessary, the milk contact surfaces shall be manually cleaned in the milkhouse. Milk contact surfaces may not be manually cleaned in a milking parlor.

(c) *Pre-milking stalls; hot water supply.* If milking animals are hosed clean in a milking parlor pre-milking stall before milking, rather than being manually cleaned at the milking stanchions, hot water under pressure shall be supplied to the pre-milking stall and used for cleaning purposes. There shall be an adequate supply of hot water so that all milking animals processed through the pre-milking stall can be fully cleaned without depleting the availability of hot water for other milking parlor or milkhouse operations.

(11) DRUG STORAGE. No drug or medicinal item, or drug administering device such as a bolus wand or syringe, may be kept in a milkhouse unless it is intended or prescribed for use on dairy animals. If drugs or medicinal items are kept in a milkhouse, they shall be stored in an enclosed cabinet, separate from all other articles stored in the milkhouse. Drugs and medicinal items shall be clearly labeled to indicate their identity and intended use, and prescription drugs shall be labeled as provided under s. ATCP 65.20 (5). Drugs and medicinal items intended solely for treatment of non-lactating milking animals shall be kept separate from those used for treatment of lactating milking animals.

ATCP 65.08 Milkhouse. (1) REQUIREMENT. Every dairy farm shall have a milkhouse. Except as provided in s. ATCP 65.16 (5), a milk producer shall cool and store milk in the milkhouse. A milkhouse shall be separate from a milking barn or parlor, but may share common

walls with a milking barn or parlor. All milking equipment and utensils shall be cleaned, sanitized and stored in the milkhouse, except for C-I-P milk pipelines that are mechanically cleaned in place in a milking barn or parlor, or C-I-P milking equipment that is mechanically cleaned and stored in a milking parlor under s. ATCP 65.06 (10) (a).

(2) ACCESS TO MILKHOUSE. Every access driveway and every exterior access door to the milkhouse shall be located in such a manner that no vehicle or a person traveling to the milkhouse must pass through an animal walkway, holding area, or yard where excessive animal waste may accumulate on the ground near these access areas.

(3) CONSTRUCTION. (a) *Floors.* A milkhouse floor shall be constructed of concrete or one or more other impervious materials, and shall be easily cleanable. This requirement does not prohibit construction with anti-slip floor surfaces that are easily cleanable. The floor shall be sloped for drainage to a floor drain. Floor drains shall be readily accessible. A floor drain shall be equipped with a trap if the floor drain is connected to a sanitary sewer system.

(b) *Walls and ceilings.* Milkhouse walls and ceilings shall be constructed and finished so that they are impervious to water, are light colored, and are easily cleanable.

(c) *Doors and windows.* A milkhouse shall not open directly into a barn, stable or milking parlor, or into a room not used for the operation of the dairy farm unless the opening is equipped with a tight-fitting, self-closing and solid door. All milkhouse external openings shall be screened or otherwise protected against entry of insects, rodents, or other pests. External doors and windows shall be tight-fitting and shall be kept closed during dusty conditions. External doors shall be self-closing. All swinging screen doors on the milkhouse shall open outward.

(d) *Lighting.* Natural or artificial lighting, or both, shall be provided in a milkhouse to ensure adequate illumination for daytime and nighttime operations. There shall be at least 30 foot-

candles of illumination in all working areas of the milkhouse. Artificial lights located over a bulk tank shall be shatterproof or shielded to protect milk from contamination with broken glass.

(e) *Ventilation.* Ventilation in a milkhouse shall be adequate to minimize odors and to prevent visible condensation on floors, walls, ceilings, clean equipment, and clean utensils. Vents shall be screened and shall be located and maintained to prevent contamination of bulk tanks or clean equipment and utensils. Exhaust fans shall be screened or louvered to prevent entry of pests when not in operation. Ventilation in an AMI room shall be sufficient to minimize odors from any nearby manure storage.

(f) *Water heating capacity.* Hot water capacity shall be adequate for all milkhouse operations. Hot water heaters or hot water supply systems shall have a capacity of at least 10 gallons for washing equipment and utensils. The division may authorize alternative systems, including heat recovery and continuous flow systems that provide adequate hot water for all milkhouse operations. Authorization shall be in writing and valid for 5 years. Re-authorization for each subsequent 5-year period shall be obtained in writing from the division.

(g) *Wash and rinse vat.* A milkhouse shall be equipped with a 2-compartment wash and rinse vat for cleaning equipment and utensils. The vat shall be served by potable hot and cold running water from a faucet or faucets located directly over the vat. Water shall enter and leave the vat by means that preclude splashing. A vat designed to hold cleaning or sanitizing solutions drawn through C-I-P milking equipment may serve as one compartment of a two-compartment wash and rinse vat under this paragraph, provided that the C-I-P inflation rack and all C-I-P milking equipment are completely removed from the vat while other equipment and utensils are being washed, rinsed, and sanitized in the vat. This paragraph shall apply to an AMI for which manual cleaning and sanitizing of AMI components must be done on a routine basis.

(h) *Handwashing facility.* A milkhouse shall be equipped with a fixed hand washing facility that is separate from the wash and rinse vat under par. (g). The hand washing facility shall be served by potable hot and cold running water from a faucet or faucets located directly over the facility. Water shall enter and leave the handwashing facility by means that preclude splashing. Soap and single service sanitary towels or another approved means of drying hands shall be available at all times for use at the hand washing facility. A hand washing facility may be located in a room immediately adjacent to the milkhouse, provided that it is readily accessible from the milkhouse. This paragraph applies to an AMI room in which the operator's hands will contact milk filters or other milk contact surfaces. This paragraph does not apply to licensed milk producers who do not hold a grade A producer permit but operate a dairy farm on which the currently used bulk tank was installed before January 1, 1979, or on which milk is stored and cooled only in cans.

(i) *Bulk tank hose port.* If a bulk tank is used to receive and hold milk in a milkhouse, the milkhouse shall have a hose port opening in the outside wall to permit the removal of milk from the bulk tank. The hose port opening shall be at least 6 inches above the floor of the milkhouse, and shall be equipped with a tight-fitting door that shall be kept closed except when the hose port is in use. A paved surface of concrete or other readily cleanable material shall be installed adjacent to the outside wall of the milkhouse, immediately under the bulk tank hose port. The paved surface shall be at least a 4 foot by 4 foot square and shall cover as much additional ground area as is necessary to protect the milk hose from ground contamination.

(4) MAINTENANCE AND SANITATION. The floors, walls, ceilings, windows, hose port assembly, and all equipment of a milkhouse shall be kept clean and in a good state of repair. Liquid wastes from milkhouse operations shall be drained and removed in a sanitary manner.

Equipment and utensils shall be cleaned and maintained in compliance with s. ATCP 65.12. A milkhouse shall be kept free of insects, rodents, and other pests. Animals shall be kept out of the milkhouse at all times. Potential sources of milk contamination, including materials that may attract or harbor pests, shall be excluded from the milkhouse.

(5) STORAGE. (a) *General.* No equipment, supplies, or other articles may be stored in a milkhouse, unless the articles are used in milkhouse operations. Articles stored in a milkhouse shall be stored above the floor, on racks, or in a cabinet. Articles shall be stored in a manner that prevents both the contamination of milk and contact of equipment or utensils with milk.

Washing machines, laundry dryers, and pasteurizers used to prepare milk-replacement formula for calves shall not be stored in the milkhouse.

(b) *Drugs and medicinal items.* No drug or medicinal item, or drug administering device such as a bolus wand or syringe, may be kept in a milkhouse unless it is intended or prescribed for use on dairy animals. If drugs or medicinal items are kept in a milkhouse, they shall be stored in an enclosed cabinet, separate from all other articles stored in the milkhouse. Drugs and medicinal items shall be clearly labeled to indicate their identity and intended use, and prescription drugs shall be labeled as provided under s. ATCP 65.20 (5). Drugs and medicinal items intended solely for treatment of non-lactating milking animals shall be kept separate from those used for treatment of lactating milking animals.

(c) *Pesticides.* No pesticides, except for sanitizers, germicides, disinfectants, or pesticides labeled and used for routine milkhouse sanitation purposes, may be stored in a milkhouse. Any of the chemicals labeled for routine use in a milkhouse must be stored in a manner that precludes contamination of milk and milk handling equipment.

ATCP 65.10 Dairy farm water supply. (1) GENERAL. An adequate supply of potable water shall be supplied under pressure for milkhouse and milking operations. Water used for milkhouse and milking operations, including water used to cool milk in a plate or tubular cooler, shall be potable. Potable water shall comply with the microbiological drinking water standards set forth in s. NR 809.30.

A properly designed and installed water supply tank that utilizes static head pressure to provide potable running water to the milkhouse is minimally adequate to comply with this paragraph.

(2) BACKFLOW PROTECTION; CROSS-CONNECTIONS. A potable water supply system on a dairy farm shall be designed, constructed, installed, and maintained to prevent contamination of the potable water supply through backflow, backsiphonage, cross-connections, or any other connection to the potable water supply system. An air gap adequate to prevent the back-siphonage or backflow of any liquids shall be maintained between every potable water outlet and the flood rim of the fixture that it supplies, and between the potable water outlet and every other source of potential contamination, unless alternative protection is approved under s. SPS 382.41.

(3) WELL CONSTRUCTION. Wells used to supply water for milkhouse and milking operations on dairy farms shall comply with ch. NR 810, 811, or 812 in the case of a community water system.

(4) WATER TRANSPORTED TO DAIRY FARM. A person transporting water in containers or tanks to a dairy farm for milkhouse or milking operations shall seal the containers or tanks to prevent contamination. The containers and tanks shall be thoroughly cleaned and sanitized before being filled with potable water for use at the dairy farm. A sanitarily designed, cleaned, and sanitized pump, hose, and fittings shall be used to transfer water from transport containers and tanks to previously cleaned and sanitized storage tanks at the dairy farm so that the water is not contaminated during transfer or by the storage tanks.

(5) WATER QUALITY TESTING BY DAIRY PLANT. A dairy plant operator, including a milk contractor that submits a milk producer license application on behalf of a milk producer and thereby certifies that the milk producer's dairy farm and milking operations comply with applicable requirements under this chapter, shall do all of the following for each milk producer from whom the dairy plant operator procures milk:

(a) Sample the milk producer's water supply at least once every two years. If the water supply system has more than one well, water from each well shall be sampled. The water sample from each well shall be taken from water before it has flowed into a pressure tank or any water treatment equipment.

(b) Sample the milk producer's water supply whenever the milk producer installs, alters, or repairs the water supply system.

(c) Sample any transported water supply used by the milk producer at the point of use, at or before first use and monthly thereafter.

(d) Have each water sample under this subsection analyzed at a laboratory that is certified under ch. ATCP 77 to perform water quality analyses. The laboratory shall analyze the water samples for compliance with the microbiological drinking water standards set forth in s. NR 809.30. The dairy plant operator shall submit each water quality analysis result to the division within 30 days after the dairy plant receives the water quality analysis result. If the analysis of any water sample indicates that the water supply of a dairy farm may be unsafe, the dairy plant operator, within 3 business days of the water quality analysis result being reported to the dairy plant operator, shall report the analysis result to the division and resample the water supply and have it analyzed.

(6) RECIRCULATING WATER SYSTEM. (a) A milk producer may use re-circulated water in a plate cooler to cool milk on a dairy farm if all of the following apply:

1. The recirculated water originates from a safe source that complies with applicable provisions of chs. NR 810, 811, or 812.

2. The recirculated water meets the microbiological standards of s. NR. 809.30.

3. The recirculated water is protected from contamination.

4. The coolant used in the water recirculation system is non-toxic food or pharmaceutical grade propylene glycol meeting the specifications in 21 CFR 184.1666, and does not contain coliform bacteria as determined by sampling and analysis done at least semi-annually by the dairy plant operator.

5. The dairy plant operator who procures milk from the milk producer tests the recirculated water for coliform bacterial contamination at least semi-annually.

(b) If a recirculating water system, under par. (a), becomes contaminated, the milk producer shall stop using the system until all the following conditions are met:

1. The milk producer eliminates the contamination source and treats the recirculated water to make it potable.

2. The dairy plant operator who procures milk from the milk producer retests the recirculated water to determine whether the contamination is eliminated.

3. Retesting shows that the recirculated water complies with the bacteriological standards under par. (c).

(c) Recirculated water shall meet all the following bacteriological test standards:

1. The most probable number (MPN) of coliform organisms shall be less than 1.1 per 100 ml. as determined using the multiple tube fermentation technique, or less than 1.0 per 100 ml. as determined using the membrane filter technique.

2. Bacteriological testing using the membrane filter technique shall show not more than 200 total bacterial colonies per 100 ml.

3. Bacteriological testing using a heterotrophic plate count technique shall show not more than 500 colonies per ml.

(7) WATER RECLAIMED FROM A HEAT EXCHANGER. (a) Water reclaimed from a heat exchanger, may be used for milkhouse and milking operations, including cooling milk in a plate or tubular cooler, if all of the following conditions are met:

1. The water is stored in a cleaned and sanitized vessel that is constructed of non-contaminating materials and is designed to protect the water supply from contamination. The storage vessel shall have a drain and access point that allow for cleaning and sanitizing.

2. There is no cross-connection between the reclaimed water and any potential contamination source or potentially unsafe water supply.

3. There are no submerged inlets through which the reclaimed water may be contaminated.

4. The water is of satisfactory organoleptic quality.

5. The water complies with the microbiological drinking water standards in s. NR 809.30.

6. The dairy plant operator who procures milk from the milk producer collects and analyzes samples of the reclaimed water supply before the milk producer first uses the water for milkhouse and milking operations, and at least semi-annually thereafter.

7. Any chemicals used to suppress bacterial growth, tastes, and odors are registered for that use with the U.S. environmental protection agency. Milk processed in or exposed to any system

using chemicals to suppress bacterial growth, tastes, and odors shall not be allowed to become contaminated with those chemicals. A milk producer who uses any chemical to suppress bacterial growth, tastes, or odors shall comply with the chemical label use instructions, and shall routinely monitor chemical concentrations in treated water.

8. Sanitizers used to sanitize equipment, utensils, teats of milking animals, or to backflush systems, shall be chemical sanitizers that comply with 21 CFR 178.1010, are registered with the U.S. environmental protection agency, and are thereby suitable for use on food contact surfaces. An approved sanitizer may be added by an automatic metering device that is located downstream from the storage vessel but upstream from the end-use application of the sanitizer.

(b) Water obtained directly from the discharge of an unpasteurized milk heat exchanger after a milking may be used once to pre-rinse dairy equipment including milk lines, milking claw assemblies, and milk receivers if all of the following apply:

1. The water is collected directly from the heat exchanger into a cleaned and sanitized wash vat or utensil sink.

2. The water piping system complies with s. ATCP 65.10 (2).

3. After pre-rinse use, the water is discharged to waste.

Note: Paragraph (b) does not prevent the use of heat exchanger discharge water for non-potable uses involving no contact with potable water, milk, milk contact surfaces or potable water contact surfaces. Before using or discharging heat exchanger discharge water, contact the Division of Water, Bureau of Drinking Water and Ground Water, at the Department of Natural Resources, P.O. Box 7921, Madison, WI 53707, telephone 608-266-0821 or TTY access via relay — 711 or http://www.dnr.state.wi.us/environmentprotect/water.html.

(8) WATER RECLAIMED FROM SOURCES OTHER THAN A HEAT EXCHANGER Water reclaimed from a compressor cooling unit, manure treatment, or from other dairy farm systems or processes may be used as non-potable water for milking barn or parlor operations, not to include rinsing, cleaning and sanitizing of milking systems, if all of the following conditions are met:

(a) The water is reclaimed by means of evaporation, reverse osmosis, ultra-filtration, or another method approved by the division.

(b) The water is stored in a cleaned and sanitized vessel that is constructed of non-contaminating materials and is designed to protect the water supply from contamination. The storage vessel shall have a drain and access point that allow for cleaning and sanitizing.

(c) There is no cross-connection between the reclaimed water and potable water supplies or between the reclaimed water and any potential contamination source or potentially unsafe water supply.

(d) There are no submerged inlets through which the reclaimed water may contaminate the potable water system.

(e) Any chemicals used to suppress bacterial growth, tastes, and odors are registered for that use with the U.S. environmental protection agency. A milk producer who uses any chemical to suppress bacterial growth, tastes, or odors shall comply with the chemical label use instructions, and shall routinely monitor chemical concentrations in the treated water.

ATCP 65.12 Equipment and utensils. (1) CONSTRUCTION; GENERAL. Equipment and utensils shall be constructed of smooth, non-absorbent, corrosion-resistant, and non-toxic materials. Equipment and utensils shall be designed and constructed so that they can be easily cleaned and shall be durable under repeated conditions of use. Surfaces shall be free of breaks and corrosion. Joints and seams shall be smooth and flush. Milk pails used for hand milking and stripping shall be seamless. Multiple-use woven material shall not be used for straining milk. Milking and milk handling systems shall comply with s. ATCP 65.14.

(2) MILK CONTACT SURFACES; CONSTRUCTION. Milk contact surfaces of equipment and utensils shall be constructed of smooth, non-toxic, and non-absorbent materials. Only the

following materials may be used on milk contact surfaces, unless another material is specifically authorized by the division in writing:

(a) Stainless steel of the American Iron and Steel Institute 300 Series, or an equally corrosion-resistant metal.

(b) Heat resistant glass.

(c) Plastic, rubber or rubber-like materials that are fat resistant and insoluble; that are resistant to scratching, scoring, decomposition, crazing, chipping and distortion under normal use conditions; that do not impart chemicals, flavor or odor to milk; and that maintain their original properties under repeated and prolonged use.

(3) MAINTENANCE. Equipment and utensils shall be kept in good repair and shall be readily accessible for inspection by the division upon request.

(4) CLEANING. Equipment and utensils shall be kept clean. Utensils and milk contact surfaces of equipment shall be rinsed immediately after each use and then washed with an effective detergent and rinsed clean. C-I-P equipment shall be pre-washed with warm water before being cleaned with a detergent solution, according to manufacturer's instructions.

(5) SANITIZING. After being cleaned and rinsed, utensils, and milk contact surfaces of equipment shall be sanitized before being used.

(6) STORAGE. Equipment and utensils, unless stored in sanitizing solutions, shall be handled and stored in a manner that will ensure complete drainage and protection from contamination before use. Equipment and utensils stored in sanitizing solutions shall be rinsed in potable water before use.

(7) SINGLE SERVICE ARTICLES. Single-service articles shall be clean and sanitary, and shall be packaged, handled, and stored in a sanitary manner. Single-service articles shall be stored in their original containers inside a dispensing cabinet. Single service articles may not be reused.

ATCP 65.14 Milking and milk handling systems. (1) SANITARY REQUIREMENTS; GENERAL. Milking and milk handling systems shall be of sanitary design and construction, and shall be installed and maintained for sanitary operation. Pressurized air that contacts a milk or milk contact surface shall be clean, safe, and free of contaminants. The milking and milk handling system shall comply with "3-A Accepted Practices for the Design, Fabrication and Installation of Milking and Milk Handling Equipment, 606-05." Milk contact surfaces shall be accessible for inspection. If it is necessary to disassemble any portion of a milking or milk handling system in order to inspect a milk contact surface, all tools necessary for the disassembly shall be readily available in the milkhouse.

Note: Guidelines for sanitary design and construction of milking and milk handling systems are set forth in the "3-A Accepted Practices for the Design, Fabrication and Installation of Milking and Milk Handling Equipment," 606-05, as amended effective November 2002, published by 3-A Sanitary Standards, Inc., 6888 Elm Street, Suite 2D, McLean, VA 22101-3850, telephone (703) 790-0295, website www.3-a.org. Milking and milk handling systems manufactured in compliance with the "3-A Accepted Practices" meet the sanitary design and construction requirements of this subsection. Copies of the "3-A Accepted Practices" are on file with the division and the legislative reference bureau. Copies may be obtained from 3-A Sanitary Standards, Inc. Online Store," at http://www.techstreet.com.

(2) MILK CONTACT SURFACES; CONSTRUCTION. Milk contact surfaces of milking and milk handling systems shall be constructed of smooth, nontoxic, and nonabsorbent materials. Materials shall be of any of the following types, unless another material is specifically authorized by the division in writing:

(a) Stainless steel of the American Iron and Steel Institute 300 series, or an equally corrosion resistant metal.

(b) Heat resistant glass.

(c) Plastic, rubber or rubber-like materials that are fat resistant and insoluble; that are resistant to scratching, scoring, decomposition, crazing, chipping and distortion under normal use conditions; that do not impart chemicals, flavor or odor to milk; and that maintain their original properties under repeated use conditions.

(3) MILK PIPELINES. (a) Milk contact surfaces of permanently mounted milk pipelines shall be constructed of stainless steel or an equally non-toxic, corrosion resistant metal, or of heat resistant glass. Plastic or rubber-like materials may be used for pipeline gaskets, connections, and sealing applications, but not for other purposes. Paper gaskets are prohibited.

(b) All joints of permanently mounted milk pipelines, including joints in solution lines, shall be welded or equipped with fittings designed for C-I-P. Welded joints shall be smooth and free of pits, cracks, or other defects. Removable fittings shall be designed to form substantially flush interior joints.

(c) Permanently mounted pipelines shall be supported at intervals of not more than 10 feet so that the pipelines remain in constant alignment and position. Permanently mounted pipelines shall be self-draining, and shall have a minimum slope of one inch per 10 feet. The support system shall be designed and constructed to prevent electrolytic reactions between supports and pipelines.

(d) Milk pipeline systems shall be designed and constructed so that cleaning, rinsing and sanitizing solutions cannot enter the pipeline while milk is being transferred through the pipeline.

(4) NON-PIPELINE SYSTEMS. The transfer of milk to the milkhouse by a method other than a pipeline or vacuum transfer system shall comply with requirements under s. ATCP 65.18 (2). If milk from milking animals is initially collected in a portable transfer receptacle and pumped to the milkhouse through a flexible tube, rather than being pumped directly to the milkhouse

through a permanently mounted pipeline, the transfer receptacle and tube system shall comply with the following requirements:

(a) The portable transfer receptacle shall be constructed of stainless steel or an equally corrosion resistant metal and shall have an overlapping self-closing cover. The receptacle shall be supported off the floor on a cart or mobile structure that can be easily cleaned.

(b) The tube used to transfer milk from the portable transfer receptacle to the milkhouse shall consist of a single length of transparent tubing material. The milk transfer tube shall be supported off the floor at all times. The interior milk contact surface of the transfer tube shall be mechanically cleaned and sanitized, and dried after each use. The opening through which the milk transfer tube enters the milkhouse shall be kept closed when the tube is not in use. A milk transfer tube shall not be left suspended in a milking barn or parlor between uses, but shall be stored in the milkhouse.

(5) MILKING EQUIPMENT. (a) Surfaces of milking equipment, including surfaces of milker claws, inflations, weigh jars, meters, milk hoses, milk receivers, and milk pumps, shall be smooth and readily amenable to cleaning and sanitizing by mechanical or manual methods. If thorough cleaning requires the removal of any part, that part shall be easily removable. Milking equipment shall be designed and constructed so that milk, milk cleaning solutions, rinsing solutions, and sanitizing solutions will drain completely from the equipment.

(b) Milking equipment that deposits milk into a bucket or container, rather than into a permanently mounted pipeline, shall be equipped with a check valve or other device that prevents moisture and contaminants from entering the milk through the temporary creation of vacuum. The moveable portion of the check valve shall consist of a single piece, or pieces that are permanently and completely bonded to each other.

(c) Automated milking installations shall comply with the requirements of s. ATCP 65.12 and this section, Appendix Q of the PMO, and all of the following:

1. All equipment shall be designed for effective C-I-P cleaning and sanitizing.

2. Valves and equipment shall effectively prevent the contamination of milk with abnormal milk or chemicals used in cleaning and sanitizing, in accordance with a written testing and verification procedure acceptable to the division. The written procedures shall be kept at the dairy farm and made available to a division representative upon request.

3. The AMI shall ensure the detection, diversion and proper handling of abnormal milk, in accordance with a written testing and verification procedure acceptable to the division. The written procedure shall include a description of the equipment cleaning and sanitizing protocol to be followed after milking of animals whose milk is intended to be excluded from the collected milk, and before milking of animals whose milk will be shipped. The written procedure shall be kept at the dairy farm and made available to a division representative upon request.

4. The AMI operator shall follow a written procedure for verifying the effectiveness of the computer software and hardware. The written procedure shall be acceptable to the division and shall be kept at the dairy farm and made available to a division representative upon request. The written procedure shall include the following items:

a. A description of the location and function of all sensors used to control and monitor the operation of the AMI.

b. A description of changes made to, or maintenance performed on, the AMI software, control and monitoring devices, instrumentation, and sensors; and other hardware associated with the AMI.

c. Instructions on how to obtain operating information stored in the AMI computer system.

5. The AMI operator shall keep a copy of the AMI manufacturer's teat preparation protocol and a written procedure for verifying the effectiveness of this protocol. This protocol shall be accepted by the federal food and drug administration and made available to a division representative upon request.

6. Verification and records review to ensure compliance with subd. 1 – 5 shall be done at a frequency determined by the division.

(6) REVIEW OF PLANS. (a) Before installing, reconstructing, or extensively altering a bulk tank, milking system, milk handling system, milkhouse, milking parlor, or dairy farm water supply system, the installer shall, on behalf of the milk producer, submit plans to the division for review. Plans for a new automated milking installation shall indicate how proper computer performance and compliance with par. (5) (c) 1. – 3. are to be verified. The department shall charge a fee of $25, as allowed by s. 93.06 (1w), Stats., to recover costs for providing the review service. The division shall return the plans, together with any comments or objections, within 14 days after the plans are received by the division. No review is required for a portable transfer receptacle or its appurtenances.

(b) No manufacturer or distributor of milking or milk handling systems may sell, or distribute for sale in this state, any portion of a milking or milk handling system unless specifications or prototype equipment are first reviewed by the division. Within 30 days after specifications or prototype equipment are received by the division, the division shall return them with any comments or objections. The division may require field testing of the equipment prior to sale if the division finds that field testing is necessary to determine whether the requirements of this section are met. Field testing shall be conducted under conditions prescribed by the division.

(c) Plans and specifications submitted under this subsection shall be sufficiently detailed to permit review by the division within the time periods specified under this subsection.

(7) CERTIFICATION OF COMPLIANCE BY INSTALLER. A person who installs, reconstructs or extensively alters a milking system, milk handling system, milkhouse, milking parlor, or dairy farm water supply system shall certify to the owner of the system that the system has been installed or modified in compliance with this section and in compliance with the plans filed with the division under sub. (6) (a). The installer, immediately after installing or modifying the system, shall provide to the milk producer and the division a signed written statement certifying compliance. The milk producer shall post a copy of the certificate in the milkhouse for at least 12 months after it is provided to the milk producer.

ATCP 65.16 Bulk tanks and bulk transport containers. (1) BULK TANK LOCATION. If a bulk tank is used to receive, cool, or store milk on a dairy farm, the bulk tank shall be installed in the milkhouse. A bulk tank may be installed so that a portion of the bulk tank protrudes through the wall of a milkhouse, provided that all bulk tank openings are located inside the milkhouse. Agitator seals, other than weatherproof agitator seals approved in writing by the division, shall be located inside the milkhouse. Clearance of at least 24 inches on the top and milk-outlet side shall be maintained on a bulk tank not protruding through the milkhouse wall to permit effective cleaning, sanitizing, and maintenance of the bulk tank. No bulk tank opening may be located directly under a ventilator. No bulk tank may be located directly over a floor drain.

(2) BULK TANK CONSTRUCTION. (a) The lining and milk contact surfaces of a bulk tank shall be constructed of stainless steel or other materials that are equally smooth, nontoxic, stable, non-absorbent, corrosion resistant, and capable of withstanding cleaning and sanitizing treatment. Milk contact surfaces shall be readily accessible for inspection.

(b) A bulk tank shall be self-draining. Openings shall be equipped with self-draining covers. Openings and covers shall be constructed and installed to prevent drainage into milk or onto milk contact surfaces.

(c) A bulk tank shall be equipped with all of the following:

1. An indicating thermometer that has a range of at least 32° F to 80° F.

2. A temperature recording device approved by the division, if the bulk tank was manufactured after January 1, 2000. The temperature recording device shall comply with sub. (3).

(d) A bulk tank with a capacity of less than 1,500 gallons shall be equipped with a mechanical agitator that will ensure homogeneity of all milk contained in the bulk tank within 5 minutes after the agitator begins operating. A bulk tank with a capacity of 1,500 gallons or more shall be equipped with an agitator that will ensure homogeneity of all milk contained in the bulk tank within 10 minutes after the agitator begins operating.

(e) A C-I-P bulk tank shall be designed and constructed so that cleaning, rinsing, and sanitizing solutions cannot enter the bulk tank while it contains milk.

Note: Bulk tanks manufactured in compliance with the "3-A Sanitary Standards for Farm Milk Cooling and Holding Tanks" meet the sanitary design and construction requirements of this subsection. The "3-A Standards" are published by 3-A Sanitary Standards, Inc., 6888 Elm Street, Suite 2D, McLean, VA 22101-3850, telephone (703) 790-0295, website www.3-a.org. Copies of the "3-A Standards" as amended effective July 23, 2012, are on file with the division and the legislative reference bureau. Copies may be obtained from "3-A Sanitary Standards, Inc., Online Store," at http://www.techstreet.com.

(3) BULK TANK TEMPERATURE RECORDING DEVICE. All of the following requirements apply to a temperature recording device under sub. (2) (c) 2.:

(a) The temperature recording device shall be capable of accurately recording temperatures between 40°F (4° C.) and 180°F (82° C.).

(b) A temperature recording chart on which the temperature recording device records milk temperatures shall have graduations of not more than 2° F. (1° C.) at temperatures below 100° F. (38° C.) and shall have at least one time span division per hour. The circular chart shall make one revolution in not more than 7 days and shall be graduated for a maximum record of 7 days.

(c) The milk producer shall retain milk temperature records for at least 6 months after the temperature recording device makes those records. Milk temperature records shall identify the milk producer, the date or dates to which the records pertain, the bulk tank to which the records pertain if there is more than one bulk tank on the dairy farm, the signature of the person who removed the temperature records from the temperature recording device, and any unusual occurrences related to milk temperature.

(d) The dairy plant operator who procures milk from the milk producer, or a milk contractor who procures milk from the producer, shall calibrate the temperature recording device every 6 months, or more often if specified by the manufacturer, and shall keep complete and accurate records of the calibration. The dairy plant operator shall make the records required under this section available to the division for inspection and copying upon request.

(e) A milk producer keeping electronic records in conformance with par. (b), (c), and (d) shall develop a written procedure for a division representative to use to review the records. The written procedure shall be acceptable to the division and made available to a division representative upon request.

(4) BULK TANK COOLING CAPACITY. A bulk milk tank shall be capable of cooling all milk placed in the tank to 50°F. (10°C.) or less within 4 hours after the start of the first milking, and to 45°F. (7°C) or less within 2 hours after the end of milking. The temperature of the blended milk from the first milking and later milkings shall not exceed 50°F. (10°C.).

(5) MILKING DIRECTLY TO BULK TRANSPORT CONTAINER. A milk producer may milk directly to a bulk milk tanker holding a grade A permit issued by the department or an equivalent regulatory agency in another state, if all the following apply:

(a) The milk producer controls the operation and maintenance of the bulk milk tanker.

Note: The milk producer is not required to own the bulk milk tanker. A milk producer may not collect milk from another milk producer, or commingle that milk with the milk producer's milk, unless the milk producer operates as a bulk milk weigher and sampler under ch. ATCP 82. A milk producer operating as a bulk milk weigher and sampler must hold a grade A bulk milk tanker permit (if applicable), and a bulk milk weigher and sampler license. The producer must also collect and sample milk according to ch. ATCP 82.

(b) The bulk milk tanker is constructed and maintained according to bulk milk tanker standards set forth in s. ATCP 82.06.

(c) The bulk milk tanker has an access port that can be sealed.

(d) The bulk milk tanker, while parked at the dairy farm, is kept on a pad of concrete or equally impervious material. The pad shall be sloped for proper drainage and shall be kept in a clean condition.

(e) All permanent pipelines connecting the bulk milk tanker to the milk handling system end in the milkhouse.

(f) The bulk milk tanker is parked such that the distance between the back of the tanker and the milkhouse is minimized and the tanker to pipeline connection is made inside the milkhouse.

(g) The milk producer cools all milk to a temperature of 45° F. (7° C.) or lower before the milk enters the bulk milk tanker. The milk producer may use a plate cooler, tube cooler or bulk tank to cool the milk. Coolant used in cooling devices shall comply with the requirements of s. ATCP 65.10 (6).

(h) A temperature recording device that records milk temperatures downstream from the cooling device under par. (g). The probe of the temperature recording device shall be mounted in a well in the milk pipeline except that if the producer cools the milk in a bulk tank the probe

may be mounted in the bulk tank. The temperature recording device shall comply with all of the requirements that apply to bulk tank temperature recording devices under sub. (3).

(i) An indicating thermometer is installed as close as possible to the temperature recording device, under par. (h), to verify recorded temperatures.

(j) The bulk milk tanker outlet valve is close-coupled and protected with an effective dust cover.

(k) The milk producer keeps the bulk milk cooling device, transport hose and bulk milk tanker outlet valve in clean and sanitary condition. The milk producer shall clean and sanitize the outlet valve before attaching the transport hose to it. The milk producer shall clean and sanitize the bulk milk cooling device and transport hose between milkings or at least once every 24 hours if the producer milks continuously.

(L) The dairy plant operator who receives the bulk milk shipment does all of the following before unloading any milk from the bulk milk tanker or commingling it with milk from another producer:

1. Tests the bulk shipment for drug residues according to s. ATCP 65.72.

2. Ensures that a person, licensed under s. 97.17 or 98.146, Stats., has collected a sample from the bulk shipment according to s. ATCP 82.12.

(m) The dairy plant operator cleans and sanitizes the bulk milk tanker after each milk shipment, the same as the operator would clean and sanitize a bulk milk tanker under s. ATCP 82.08. The dairy plant operator shall seal the access port after cleaning and sanitizing the bulk milk tanker.

ATCP 65.18 Milking procedure. (1) PREPARING MILKING ANIMALS FOR MILKING. A milk producer shall clip the flanks, udder, belly, and tail of each milking animal as often as necessary

to facilitate cleaning. The tail, belly, and flanks shall be reasonably free of visible dirt at the time of milking. If flanks and udders are brushed, brushing shall be completed before milking begins. Hair on udders shall be kept short enough so that it is not incorporated with the teat in the milking machine inflation during milking. The udder of each milking animal shall be clean at the time of milking. Teats shall be cleaned, sanitized, and dried immediately before milking. Wet hand milking is prohibited.

(2) TRANSFER AND PROTECTION OF MILK. Milk shall be protected from contamination at all times. Upon being drawn from milking animals, milk shall immediately be transferred from the milking barn or parlor to the milkhouse. Containers of milk may not be stored in the milking barn or parlor. If milk is transferred to the milkhouse in containers, rather than through a pipeline or other vacuum transfer system, the milk producer shall transfer each container of milk to the milkhouse immediately after it is filled. Milk contact surfaces of equipment and utensils used to collect or transfer milk shall be protected from contamination before and during use. Inflations that contact unclean substances such as manure or water on the milking parlor floor after milking of an animal is complete shall be cleaned and sanitized before being used to milk the next animal. Milk containers shall be covered to protect milk and milk contact surfaces from contamination, except when milk is being poured into or out of the container. Milk that overflows, leaks, or spills from its proper container or transfer vessel shall be discarded.

(3) PERSONNEL; CLEANLINESS. Milkers and milk handlers shall wash and dry their hands before engaging in milking or milk handling operations, and before resuming such operations after engaging in other activities. Milkers and milk handlers shall wear clean outer garments so that milk, milk contact surfaces, or the hands of a milker or milk handler do not become contaminated by contact with soiled outer garments. If outer garments become soiled, they must

be changed. No person may engage in milking or milk handling operations if that person exhibits reportable symptoms of a communicable disease as defined in s. ATCP 75 Annex 2-201.11 (A) (1) or has received a reportable diagnosis of communicable disease as defined in s. ATCP 75 Annex 2-201.11 (A) (2) .

(4) COOLING MILK. (a) Except as provided under par. (b), milk shall be cooled to 50°F. (10°C.) or less within 4 hours after the start of the first milking, and to 45°F. (7°C) or less within 2 hours after the end of milking. The temperature of the blended milk from the first milking and later milkings shall not exceed 50°F. (10°C.).

(b) Grade B milk in cans shall be cooled to 50° F. (10° C.) or less within 2 hours after milking, and shall be kept at or below 50° F. (10° C.) until it is delivered to the dairy plant. If milk is stored or cooled in cans, milk from a morning milking shall not be commingled with milk from an evening milking.

(c) Frozen sheep milk shall be maintained in a frozen state for not more than 60 days from the time it was collected on a dairy farm and shall remain frozen until received by a dairy plant.

(5) STRAINING MILK. Milk shall be strained before it flows into a bulk tank or shipping container. Only clean, single-service filters may be used to strain milk. Filters shall not be reused.

(6) COMMINGLING OF MILK FROM DIFFERENT MILKING SPECIES PROHIBITED. A milk producer may not commingle milk from one species of milking animal with the milk of another species of milking animal.

Note: Cows are the same species, even if they are of different breeds, so their milk may be commingled. However, cows and goats are different species and their milk may not be commingled.

(7) MILK COOLING AND STORAGE. Milk cooled and stored on a dairy farm shall be cooled and stored in facilities that comply with this chapter.

ATCP 65.20 Abnormal milk; milking diseased animals. (1) Milking animals that appear to be secreting abnormal milk from one or more quarters shall be milked last or with separate equipment, and their milk shall be discarded.

(2) If milking animals consume or are treated with chemical, medicinal, or radioactive agents which may be secreted in milk and that may be deleterious to human health, the milking animals shall be milked last or with separate equipment, and their milk shall be discarded.

(3) Milk that is bloody, stringy, off-colored, visibly abnormal, abnormal in odor, or abnormal in any other respect shall be discarded.

(4) Equipment and utensils used to handle abnormal milk shall not be used to handle milk produced for human consumption unless the equipment and utensils are first thoroughly cleaned and sanitized.

(5) Drugs prescribed by a veterinarian for use on milking animals shall be clearly labeled with the name of the drug, each active ingredient, directions for use, the length of time for which milk must be withheld following the cessation of drug therapy, any applicable warnings or precautions to be observed by the milk producer, and the name and complete address, including zip code, of the prescribing veterinarian. No drug or medicinal item may be used in a manner inconsistent with label directions or the veterinarian's prescription, or in a negligent manner.

(6) Abnormal milk or milk from diseased animals shall not be stored or held in the milkhouse or milking parlor after being collected. The milk shall be immediately removed and discarded.

ATCP 65.22 Farm premises. (1) GENERAL. Farm premises adjacent to a milking barn, milking parlor, or milkhouse shall be kept free of conditions that may result in the contamination of milk.

(2) MANURE STORAGE AND DISPOSAL. Manure shall be removed and stored in a manner that inhibits the breeding of flies. No milking animals may have access to a manure storage area. This does not prohibit a cold weather manure pack in a cowyard if the manure pack is properly maintained to prevent excessive accumulations of manure on the udders and flanks of milking animals.

(3) COWYARD. A cowyard shall be graded for proper drainage and shall be kept free of standing pools of water and accumulations of manure or feed waste. In loafing pens, manure shall be removed or clean bedding added with sufficient frequency to prevent visible soiling on the udders and flanks of milking animals. Waste feed shall be promptly removed. Manure packs shall be properly drained and shall provide a reasonably firm footing. Swine shall be kept out of the cowyard.

(4) STATIONARY FEEDERS IN COWYARD. Stationary feeders in a cowyard shall be fully surrounded by a paved surface on which milking animals stand while feeding. The paved surface shall extend at least 12 feet in all directions from the feeder, except that a paved surface installed before January 1, 1979, shall extend at least 8 feet in all directions from the feeder. If the distance between a feeder and another building or permanent structure is less than the paved surface width prescribed under this subsection, the paved surface shall extend to the building or other permanent structure.

(5) STOCK WATERING DEVICES AND PORTABLE FEEDERS IN COWYARD. Stock watering devices and portable feeders shall be located in an area that is well drained and provides reasonably firm footing for animals using the facilities.

(6) TOILETS. (a) Every dairy farm shall have one or more sanitary toilets that are conveniently accessible by persons engaged in milking operations. A conveniently accessible toilet may include a toilet in a farm residence or other farm building.

(b) Toilets, under par. (a), shall comply with chs. SPS 362. Toilets shall be kept in clean and sanitary condition.

(c) There shall be no mixing or storage of human waste or septage with animal manure on a dairy farm.

(7) PEST CONTROL. Insects, rodents, and other pests shall be controlled to prevent the contamination of milk and milk contact surfaces of equipment and utensils. Pesticides shall not be stored, handled or used in a manner that might contaminate milk, milk contact surfaces, feed, or water.

Note: Pesticide storage and use must comply with ss. 94.67 to 94.71, Stats., and ch. ATCP 29. Pesticides must be registered for use by the U.S. environmental protection agency or by the department. Pesticides shall not be stored, handled or used in a manner inconsistent with label directions, or in a negligent manner.

(8) ANIMAL DRUG STORAGE. No animal drug or medicinal item may be kept in or immediately adjacent to dairy farm facilities used for dairying operations unless the animal drug or medicinal item is designed or prescribed for use on milking animals. Animal drugs and medicinal items stored immediately adjacent to the milking barn, milking parlor, or milkhouse shall be protected from outdoor conditions and shall be stored above the floor, on racks or in a cabinet. Animal drugs and medicinal items shall be stored in a manner that prevents contamination of milk and equipment and utensils coming in contact with milk. Animal drugs and medicinal items shall be clearly labeled to indicate their identity and intended use and prescription drugs shall be labeled as provided under s. ATCP 65.20 (5). Animal drugs and medicinal items intended solely for non-lactating milking animals shall be stored separately from those used on lactating milking animals.

SUBCHAPTER III

DAIRY PLANTS

ATCP 65.23 Federal requirements. (1) GRADE A DAIRY PLANTS. (a) A grade A dairy plant that is a qualified facility shall comply with the requirements of 21 CFR 117 Subpart B and 117.201.

(b) A grade A dairy plant that is a facility shall comply with the requirements of 21 CFR 117 Subpart B and the PMO.

(2) GRADE B DAIRY PLANTS. (a) A grade B dairy plant that is a qualified facility shall comply with the requirements of 21 CFR Subpart B, 117.201, and Subpart F.

(b) A grade B dairy plant that is a facility shall comply with the requirements of 21 CFR Subparts B, C, F, and G.

ATCP 65.24 Construction and maintenance. (1) GENERAL. (a) Buildings, facilities, and equipment used in the operation of a dairy plant shall be soundly constructed and shall be capable of being maintained in a clean and sanitary condition. The interior and exterior portions of a dairy plant and the premises on which a dairy plant is located shall be kept free of unhealthful and unsanitary conditions and shall be maintained in compliance with this chapter.

(b) The division may issue a written waiver granting a variance from a construction standard under this subchapter if the division finds that the variance is reasonable and necessary under the circumstances, and will not compromise the purpose served by the construction standard and the facility does not hold a grade A permit. A waiver under this paragraph may be issued by the administrator of the division or the administrator's designee.

(c) After the effective date of this chapter, a dairy plant may not be directly connected to a milking barn, milking parlor or animal housing area. A dairy plant may be separated from a

milking barn, milking parlor or animal housing area by a room not used for animal husbandry or milking, provided doors between the dairy plant, the room not used for animal husbandry or milking, and the milking barn, milking parlor, or animal housing area are self-closing and kept closed when not in use.

(2) FLOORS. The floors of all rooms in which dairy products are processed, handled, or stored or in which dairy product containers, equipment, or utensils are cleaned and sanitized shall be all of the following:

(a) Kept clean and in good repair.

(b) Smooth enough to be easily cleanable.

(c) Constructed of concrete or equally impervious and easily cleanable materials. This paragraph does not prohibit tightly joined wooden floors in storage rooms used solely for the storage of dry ingredients or packaging materials, or both.

(d) Sloped to provide adequate drainage. This paragraph does not apply to floors in storage rooms used solely for the storage of dry ingredients or packaging materials, or both.

(e) Equipped with an adequate number of trapped floor drains, so that any liquids draining onto the floors are promptly removed. Floors in refrigerated storage rooms need not have floor drains if the floors are sloped to drain to one or more exits to prevent pooling of liquids. This paragraph does not apply to floors in storage rooms used solely for the storage of dry ingredients or packaging materials, or both.

(3) WALLS AND CEILINGS. (a) Walls and ceilings of rooms in which dairy products are handled, processed, or stored, or in which dairy product containers, equipment, or utensils are cleaned and sanitized, shall have a smooth, washable, and light-colored surface, and shall be kept clean and in good repair. Suspended ceiling panels are prohibited in any room where powdered

dairy products are packaged or processed if that room was constructed or substantially altered after December 1, 1994.

Note: Walls and ceilings may consist, for example of smooth finished concrete construction panels or cement plaster.

(b) If condensation may accumulate on overhead pipes, ducts, or other fixtures, those fixtures shall be arranged or shielded so that condensation does not drop into dairy products or ingredients, or onto product contact surfaces of equipment, utensils, or packaging materials.

(c) In rooms constructed or substantially altered after the effective date of this chapter, the junctions of walls and floors in processing areas shall be coved to facilitate cleaning.

(4) DOORS, WINDOWS, AND OTHER OPENINGS. (a) Doors, conveyor openings, and other openings to the outside environment shall be kept closed when not in use, and shall at all times be protected against the entry of insects, rodents, and excessive dust. Doors to the outside, other than overhead doors and electronic sliding doors in delivery areas of milk receiving stations and grade B dairy plants, and emergency exit doors routinely used by dairy plant personnel shall be self-closing. External screen doors, if any, shall open outward.

Note: Air curtains, strip curtains, and similar devices may be used to prevent insects and excessive dust from entering through doors and other openings while those openings are in use.

(b) Windows, if not permanently closed, shall be screened against flying insects, rodents, and birds. In dairy plants constructed or substantially altered after the effective date of this chapter, window ledges shall be sloped to an angle of at least 45° below horizontal to facilitate cleaning.

(c) Outside openings of dairy product pipelines shall be tightly capped when not in use. When a pipeline is in use, the pipeline cap shall be tethered or placed on a sanitary hanger or rack to protect it from contamination. Pipeline openings through walls shall be completely cemented or fitted with tight metal collars.

(d) At each doorway leading from a non-processing area to a processing area in which exposed dairy products are processed, a dairy plant operator shall provide a sanitizing footbath, disposable footwear, dedicated footwear, or other facilities to ensure that footwear worn in the processing area is clean and sanitary.

(5) LIGHTING. (a) Lighting in every area of a dairy plant shall be fully adequate for the purpose for which the area is used. Except as provided under par. (b) or (c), there shall be at least 5 foot candles (54 lux) of illumination, measured at 30 inches above the floor, in every part of a dairy plant.

(b) Except as provided under par. (c), there shall be at least 30 foot candles (323 lux) of illumination at every place where dairy products are processed and at every place where equipment or utensils are cleaned and sanitized.

(c) There shall be at least 50 foot-candles (538 lux) of illumination on every surface where dairy products are graded or examined for condition and quality, and on every surface where multi-use packages are inspected before being reused.

(d) Light bulbs, fluorescent light tubes, skylights, and other overhead glass fixtures shall be shielded to prevent broken glass from falling into dairy products or onto dairy product contact surfaces.

(6) VENTILATION. (a) Every room in a dairy plant shall be adequately ventilated and adequately controlled for temperature and humidity to keep the room reasonably free of fumes, odors, mildew, and excessive condensation.

(b) Ventilation systems, including exhaust fans, intake fans, and ventilation ducts, shall be kept clean and in good repair and shall be screened or louvered to prevent contamination of dairy products, ingredients, equipment, utensils, or packaging materials by dust, insects, or other

contaminants. Intake fans shall be equipped with filters that are readily removable for cleaning and replacement. Air intake filters shall be capable of removing at least 85% of particulate matter that is 5 microns or larger in size.

(c) Ventilation systems in a dairy plant shall be positioned so that exhaust air does not contaminate exposed dairy products, clean dairy product packages, or clean equipment or utensils.

(7) ROOMS. (a) Dairy plant rooms shall be large enough so that activities conducted in those rooms can be conducted in a safe and sanitary manner.

(b) Within a dairy plant, all of the following areas shall be located in separate rooms:

1. Raw milk unloading areas.

2. Areas used to clean and sanitize bulk milk tankers or bulk transport containers. Bulk milk tankers and bulk transport containers may be cleaned and sanitized in the same room where they are unloaded.

3. Processing areas.

4. Areas used to clean or sanitize dairy product packages or containers.

5. Areas used to store or fabricate dairy product packages. Packaging materials required for each day's processing operations may be kept in a processing area on that day.

6. Areas used to store dairy product ingredients, other than raw milk. Ingredients required for each day's processing operations may be kept in the processing area on that day.

7. Areas used to receive, handle, or store returned packaged dairy products.

8. Areas used for boiler, heating plant, utility, or maintenance equipment.

9. Employee toilet areas.

10. Employee locker areas, dressing areas, break areas, and lunch areas.

11. Areas, if any, used as living quarters. Processing or storage rooms that are constructed after the effective date of this chapter, and share one or more walls with adjacent living or sleeping quarters, shall have a separate entrance and shall not provide direct access to the living or sleeping quarters.

(c) In dairy plants constructed or licensed after December 1, 1994, raw milk shall be unloaded in a fully enclosed intake room.

(d) Notwithstanding par. (b), a dairy plant operator may store, cool, separate, and clarify raw milk in an area that the operator uses to unload bulk milk shipments if all the following apply:

1. The area is within a fully enclosed room.

2. Containers used to store, cool, separate, and clarify the raw milk are filtered or vented to a separate room to protect the milk from airborne contamination in the unloading area. If containers are vented to a separate room, that room shall comply with processing area sanitation standards under this chapter.

(e) Notwithstanding par. (d), a dairy plant operator may not store, cool, separate, or clarify raw milk in a room used to unload bulk milk shipments if any of the following apply:

1. The dairy plant was constructed or licensed after December 1, 1994.

2. The dairy plant is a grade A dairy plant constructed or licensed after July 1, 1980.

3. The storage, cooling, separating, or clarifying operations were initiated after December 1, 1994.

(f) Rooms, other than rooms adjacent to sleeping or living quarters, are considered separate, for purposes of this subsection, if they are fully separated by permanent floor-to-ceiling partitions and if doorways between the rooms are equipped with solid, tight-fitting, self-closing doors. Rooms adjacent to sleeping or living quarters must comply with sub. (11) above.

(8) DAIRY PLANT WATER SUPPLY. (a) Water used in dairy plant operations, or as an ingredient in dairy products, shall be obtained from a source that complies with applicable provisions of chs. NR 811 or 812. All water obtained for use in a dairy plant shall comply with the microbiological standards in ch. NR 809. Water shall be available in consistently adequate quantity for all dairy plant operations, including processing, cleaning, handwashing, and drinking. The division may grant a conditional waiver for elevated levels of non-microbial contaminants as defined in NR 809 in processing water or ingredient water.

(b) If a dairy plant uses water from a privately owned water system, the dairy plant operator or, in the case of a grade A dairy plant, the division shall, at least once every 6 months, and after a repair or alteration to the water system, collect and analyze a sample of the water for compliance with the microbiological standards under s. NR 809.30. If a dairy plant produces grade A and grade B products, a division representative shall collect and analyze the water samples. If the water supply is from more than one well, each well shall be sampled and tested. Each sample shall be taken upstream from any pressure tank or other water treatment equipment. Microbiological analyses shall be conducted in a laboratory certified under ch. ATCP 77.

(c) At the division's request, a dairy plant operator who receives water from a municipal source shall provide the division with documentation showing that the water complies with the microbiological standards under s. NR 809.30.

(d) Recirculated water may be used in a cooler or heat exchanger that may come in contact with any dairy product if it is all of the following:

1. Obtained from a safe source that complies with par. (a), or reclaimed in compliance with s. ATCP 65.24 (9) (b).

2. Bacteriologically safe, protected from contamination, and

3. Tested by the dairy plant operator at least semiannually or, in the case of a grade A dairy plant, by the department at least semiannually.

(e) If a recirculating water system becomes contaminated, that system may not be used until it is properly treated and retested to ensure that the contamination has been eliminated. The freezing point depressants used in recirculating water systems shall be food or pharmaceutical grade, non-toxic propylene glycol, and shall not contain coliform bacteria as determined by sampling and analysis which the dairy plant operator has done at least semi-annually.

(f) A dairy plant operator may use only potable water, or reclaimed water in compliance with sub. (9) (c), to produce culinary steam. In boilers used to produce culinary steam, boiler water additives shall comply with 21 CFR. 173.310.

(g) All of the following requirements apply to water that is transported to a dairy plant in a container or tank, for use in dairy plant operations:

1. The water shall be potable.

2. The container or tank shall be thoroughly cleaned and sanitized before being filled.

3. The container or tank shall be sealed, and the water shall be protected from contamination during transit.

4. A food-contact appropriate, cleaned and sanitized pump, hose, and fittings shall be used to transfer water from the container or tank to a storage tank at the dairy plant, so that the water is not contaminated during transfer.

(h) If a grade A dairy plant uses water to flush pasteurized milk or milk products from milk processing systems, that water shall be of a microbiological quality equivalent to that of pasteurized milk.

(9) RECLAIMED WATER. (a) A dairy plant operator may use water reclaimed from heat exchanger processes or from the condensation of milk or dairy products if all the following apply:

1. The water is reclaimed from a heat exchanger process or by means of evaporation, reverse osmosis, or ultrafiltration.

2. The water meets applicable use conditions under par. (c).

(b) Except as provided in par. (c), reclaimed water may not be used for any purpose requiring potable water unless all the following apply:

1. The department pre-inspects and pre-approves the reclamation system.

2. The reclaimed water contains less than 1 coliform bacterium per 100 ml. of water.

3. The reclaimed water otherwise meets the microbiological standards set forth in s. NR 809.30.

4. The organic content of the water is less than 12 mg. per liter as measured by the chemical oxygen demand or permanganate-consumed test, or the water has a standard turbidity of less than 5 units. The dairy plant operator shall use an automatic fail-safe monitoring device to identify, and automatically divert to a waste water system, any water reclaimed from the condensation of dairy products if that water fails to meet this standard.

5. The reclaimed water is of satisfactory organoleptic quality. The dairy plant operator shall sample and organoleptically test reclaimed water at weekly intervals.

6. Any chemicals used to suppress bacterial growth, tastes, or odors in the reclaimed water are registered for that use with the U.S. environmental protection agency. The dairy plant operator who uses any chemical to suppress bacterial growth, tastes, or odors shall comply with the chemical label instructions. An added chemical may not contain any substance that may

contaminate dairy products or limit the use of reclaimed water. An automatic proportioning device shall add the chemicals to the water before the water enters the storage tank. The dairy plant operator shall test reclaimed water at least daily to verify that each added chemical is present at an approved level.

7. The reclaimed water is stored in a properly constructed tank. The tank shall be constructed of a material that can be easily cleaned and sanitized and will not contaminate the water.

8. The dairy plant operator or, in the case of a grade A dairy plant, the division tests the reclaimed water for compliance with microbiological and organic content standards at least semi-annually. The operator shall test the reclaimed water for 14 working days after the department approves the reclamation system under subd. 1., and for at least 7 working days after any repairs or alterations to the system.

9. There are no cross-connections between reclaimed water lines and any public or private water system.

10. Reclaimed water from membrane processing of unpasteurized milk or unpasteurized dairy products shall be heat-treated for a time and at a temperature providing at least the same lethality against microorganisms as milk pasteurization.

(c) Reclaimed water may be used for the limited purposes of producing culinary steam, pre-rinsing food contact surfaces of equipment or utensils, or preparing cleaning solutions if all the following apply:

1. The reclaimed water meets all conditions under par. (b) 1., 2., 4. to 7., and 9.

2. The reclaimed water is used only on the day that it is reclaimed, except that reclaimed water may be stored for later use if it is automatically maintained at a temperature of not less

than 145° F. (63° C.), or is chemically treated to suppress bacterial propagation. Chemical treatments shall comply with par. (b) 6.

3. Distribution lines and hose stations used to distribute the reclaimed water are clearly identified as "limited-use reclaimed water."

4. The dairy plant operator posts clear instructions for the use of the reclaimed water. The operator shall post the instructions so that they will be seen by persons using the reclaimed water, and the instructions shall be written in such a way that they will be understood by the persons using the reclaimed water. The instructions shall disclose the limited purposes for which the reclaimed water may be used.

5. Water lines distributing the reclaimed water are not permanently connected to dairy product vessels. If a water line is temporarily connected to a dairy product vessel, there shall be an atmospheric break and automatic controls to prevent the reclaimed water from contacting dairy products.

(d) Reclaimed water that does not qualify for use, under par. (b) or (c), may only be used as boiler feedwater.

(10) PLUMBING SYSTEM; DISPOSAL OF SEWAGE AND LIQUID WASTE. (a) All dairy plant plumbing, plumbing fixtures, and equipment shall comply with state and local plumbing codes and shall be designed, installed, and maintained to prevent backflow, backsiphonage, and cross-connections.

(b) Sewage and liquid waste from a dairy plant shall be removed in a sanitary manner, in compliance with applicable state and local regulations.

Note: Plumbing and plumbing fixtures must comply with applicable rules of the Wisconsin department of safety and professional services under chs. SPS 382 to 386.

(11) CLEANING FACILITIES. (a) If equipment or utensils in a dairy plant are cleaned or sanitized manually, the dairy plant shall be equipped with wash and rinse sinks that are suitable for all manual cleaning and sanitizing operations. Sinks shall be conveniently located and adequate in number, and shall comply with all of the following requirements:

1. Every sink shall be constructed of stainless steel or one or more other materials approved by the division.

2. Every sink shall have at least 2 compartments. If a dairy plant is also engaged in food processing as defined under s. 97.29 (2) (b), Stats., every sink installed in a food processing area after December 1, 1994 shall have at least 3 compartments for washing, rinsing, and sanitizing equipment and utensils unless the dairy plant operator uses an alternative method for sanitizing equipment and utensils that the division has approved in writing.

3. Every sink compartment shall be large enough so that the largest item cleaned or sanitized in the sink can be halfway immersed in the sink. Every sink compartment shall be served by hot and cold running water and shall be cleaned prior to each use.

(b) Sinks used to clean and sanitize equipment and utensils may not be used as handwashing sinks.

(c) Brushes and other cleaning tools used to clean equipment and utensils shall be cleaned after each use and sanitized prior to their next use. Single-service disposable towels, if used to clean equipment or utensils, shall be discarded after a single use.

(d) If a mechanical system is used to clean or sanitize equipment or utensils, the mechanical system shall be designed, installed, and maintained so that it is fully effective for the purpose used.

(e) A dairy plant shall be equipped with conveniently located hose connections to facilitate cleaning operations in the dairy plant. When hoses are not in use, they shall be neatly stored off the floor on racks or reels.

(12) TOILET FACILITIES. (a) Every dairy plant shall have toilet facilities that comply with chs. SPS 361 to 365.

(b) Toilet rooms shall be conveniently located, but shall not open directly into any room where milk or dairy products are processed. Every toilet room shall be completely enclosed and shall have a tight-fitting, solid, self-closing door. The door shall be kept closed except when in use or when the toilet room is being cleaned or repaired.

(c) Toilet rooms and fixtures shall be kept clean, sanitary, and in good repair. A supply of toilet tissue shall be provided at each toilet at all times.

(d) Every toilet room shall be equipped with hand-washing facilities with hot and cold running water, soap, and single-service towels or air hand-drying equipment. Common towels are prohibited. Easily cleanable, covered receptacles shall be provided for waste materials.

(e) One or more conspicuous signs, directing personnel to wash their hands before returning to work, shall be prominently posted in every toilet and dressing room. Signs shall be clearly printed in a language or languages that can be understood by all dairy plant personnel.

(13) LOCKER AND LINEN FACILITIES. (a) Clothing and personal items of dairy plant personnel, when not being worn or carried, shall be neatly stored in lockers or comparable facilities provided for that purpose. Clothing and personal items may not be stored in areas where milk, dairy products, or ingredients are received, processed, handled, or stored, or in areas where dairy product containers, equipment, or utensils are cleaned or stored.

(b) Work clothing, when not being worn by dairy plant personnel, shall be stored in an orderly and sanitary manner. Soiled linen and clothing shall be kept in nonabsorbent containers or laundry bags until removed for laundering or disposal. Soiled linen and clothing shall be removed as often as necessary to prevent unsanitary conditions.

(14) HANDWASHING SINKS IN PROCESSING AREAS. (a) Handwashing sinks shall be provided for use by all dairy plant personnel working in each processing room or area. The sinks shall be conveniently accessible, and shall be kept in a clean and sanitary condition.

(b) A supply of soap or detergent, and a sanitary, single-service means for drying hands, shall be provided at each handwashing sink at all times. Common towels are prohibited. If disposable towels are used, a clean, covered waste receptacle shall be provided for their disposal.

(c) A handwashing sink may not be used to rinse, wash, or sanitize equipment or utensils.

(d) A handwashing sink installed to serve a processing area shall be located in that processing area. The sink shall be served by potable tempered water, or by potable hot and cold water delivered through a mixing valve or combination faucet. The sink shall not be hand operated. If a self-closing, slow-closing, or metered faucet is used, the faucet shall provide an uninterrupted flow of water for at least 15 seconds before it becomes necessary to reactivate the faucet.

(e) An automatic handwashing device may be substituted for a handwashing sink under this subsection if the automatic handwashing device operates in a safe and effective manner.

(15) INTERIOR PREMISES; CLEANLINESS. Every room of a dairy plant shall be kept in a clean and orderly condition.

(16) EXTERIOR PREMISES; CLEANLINESS. (a) The premises surrounding a dairy plant shall be well drained and shall be kept in an orderly condition. The premises shall be kept free of

accumulated trash, garbage, excess vegetation, and other objects that may harbor vermin, be a source of airborne dust or dirt, or hold standing water. Driveways and parking lots shall be surfaced or maintained to minimize airborne dust and dirt.

(b) Every outdoor storage tank used for liquid food ingredients shall be located on a drained impermeable surface. All loading and unloading of liquid food ingredients from that storage tank shall be conducted above a drained impermeable surface.

(17) GARBAGE AND SOLID WASTE DISPOSAL. (a) Garbage and solid waste shall be removed from the dairy plant premises as often as necessary to keep the premises in a clean and sanitary condition.

(b) Garbage and solid waste storage areas shall be constructed and maintained so that they are easily cleanable and do not attract or harbor insects, rodents, or other animals; do not hold standing water, and are not a source of airborne dust or dirt.

(c) Garbage and solid waste shall be held in durable, leak-proof, easily cleanable, and pest-resistant containers. Containers shall be covered with tight-fitting lids, and shall be cleaned when necessary to prevent unsanitary conditions. Waste containers receiving solid waste from packaging and bottle washing operations may be uncovered, if necessary, when those operations are in progress.

(d) No garbage or solid waste may be burned on the dairy plant premises, except in compliance with state and local regulations. No garbage or solid waste may be burned on the premises if the burning may contaminate dairy products.

(18) PEST CONTROL. A dairy plant shall be free of any evidence of insect, rodent, or other pest infestation. A dairy plant operator shall take effective measures to prevent and, if necessary, eradicate pest infestations. No pesticide may be stored, handled, or used in a manner

inconsistent with label directions, in a negligent manner, or in a manner that may contaminate dairy products.

Note: Pesticides must be handled, stored, and used in compliance with ss. 94.67 to 94.71, Stats., and ch. ATCP 29.

(19) CONSTRUCTION PLANS; NOTIFICATION; REVIEW. Before constructing, substantially reconstructing, or extensively altering a dairy plant, a dairy plant operator shall provide the division with complete plans and specifications for the construction, reconstruction, or alteration. Within 30 days after a dairy plant operator files plans with the division under this subsection, the division shall return its comments or objections, if any, in writing.

ATCP 65.26 Personnel; sanitation standards. (1) CLEANLINESS AND SANITATION; GENERAL. (a) Within a dairy plant, access to processing areas shall be restricted to dairy plant employees and other authorized personnel.

(b) Persons who handle or process dairy products shall maintain a high degree of personal cleanliness, and shall observe good hygienic practices during all working periods.

(c) Persons who handle or process dairy products shall thoroughly wash their hands before beginning work and before returning to work after using toilet facilities, eating, smoking, or engaging in other activities that may contaminate their hands.

(d) A person with a discharging or infected lesion on a hand or arm may not handle or process unpackaged dairy products without appropriate sanitary protection. Appropriate sanitary protection shall include any of the following:

1. An impermeable bandage on the lesion.

2. Single-use sanitary gloves or, if the lesion is on the arm, a full sleeved garment with tight fitting cuffs.

(e) A person who handles or processes dairy products shall keep his or her fingernails clean and neatly trimmed and shall not wear fingernail polish unless he or she wears sanitary gloves at all times when working.

(f) No person exhibiting reportable symptoms of communicable disease, as defined in s. ATCP 75 Annex 2-201.11 (A) (1), or who has received a reportable diagnosis of communicable disease as defined in s. ATCP 75 Annex 2-201.11 (A) (2) may work in a dairy plant in any capacity that may contaminate dairy products.

(2) CLOTHING AND JEWELRY. (a) Whenever any person is in a processing area or is engaged in handling unpackaged milk or dairy products, that person shall wear clean, washable outer garments and an effective hair restraint, including an effective hair restraint for any beard longer than 1/2 inch. Hair restraints may include hair nets, caps, and snoods, but do not include hairsprays, visors, or headbands.

(b) No person may wear any jewelry while working in a processing area or handling unpackaged dairy products. This paragraph does not apply to plain band wedding rings or medical alert necklaces worn under garments and secured by adhesive tape to the inside of undergarments.

(3) CONSUMPTION OF FOOD AND BEVERAGES, AND USE OF TOBACCO. No person may consume food or beverages, or use tobacco in any processing area or in any area where dairy processing equipment, utensils, or packaging materials are cleaned or stored. Employees may not consume food or beverages or use tobacco except in designated areas that are separated from food storage or processing areas. This subsection does not prohibit a sanitary water fountain in a processing area, nor does it prohibit on-line quality control sampling and organoleptic evaluation according to written quality control procedures established by the dairy plant operator.

ATCP 65.28 Equipment and utensils. (1) CONSTRUCTION AND MAINTENANCE. (a) Equipment and utensils, including C-I-P systems, shall be of sanitary design and construction. Equipment and utensils, including C-I-P systems installed after the effective date of this chapter, shall comply with applicable "3-A Sanitary Standards" and "3-A Accepted Practices" listed in ch. ATCP 65 APPENDIX A.

Note: The "3-A Sanitary Standards" and "3-A Accepted Practices" listed in APPENDIX A are published by 3-A Sanitary Standards, Inc., 1451 Dolley Madison Boulevard, Suite 210, McLean, VA 22101-3850, telephone (703) 790-0295, website www.3-a.org. Copies are on file with the division and the legislative reference bureau and may be obtained from the "3-A Sanitary Standards, Inc. Online Store" at http://www.techstreet.com.

(b) Equipment and utensils shall be readily accessible for cleaning and inspection and shall be designed and constructed so that they can be easily cleaned. Equipment and utensils shall be kept clean and in good repair.

(c) Tanks, vats, separators, and other containers used to store or process dairy products shall be designed or equipped with appropriate devices to prevent surface condensation and drainage from entering the container.

(d) Pipeline systems used to convey dairy products shall contain no dead ends in which dairy products may collect. Pipelines and other equipment shall be designed and constructed to prevent cross-contamination between pasteurized dairy products, unpasteurized dairy products, and cleaning and sanitizing solutions.

(e) If it is necessary to disassemble any equipment or utensil to inspect a product contact surface, all tools needed for the disassembly shall be readily available at the dairy plant.

(f) Water hoses used to wash dairy products or add ingredient water to dairy products shall be constructed of approved food grade materials and shall be used and stored in a sanitary manner.

(g) A dairy plant operator may use sanitary flexible pipelines to transfer partially processed products in the intermediate stages of production or to load and unload bulk loads of milk from transport vehicles, if all the following apply:

1. The use of rigid pipelines for that purpose in a sanitary manner is not possible due to the location of walls, floors, ceiling or other equipment.

2. The dairy plant operator properly cleans and sanitizes the flexible pipeline after completing the transfer of product, or at least once during each day of use.

3. The operator uses only a length of flexible pipeline necessary to conduct the transfer operation.

(2) PRODUCT CONTACT SURFACES. (a) Product contact surfaces of equipment and utensils shall be made of materials that are smooth, impervious, nontoxic, noncorrosive, nonabsorbent, and durable under foreseeable use conditions. A product contact surface shall be constructed of one or more of the following materials unless the division specifically authorizes another material in writing:

1. Stainless steel of the American Iron and Steel Institute 300 series, or an equally corrosion resistant metal.

2. Heat resistant glass.

3. Plastic, rubber, or rubber-like materials that are fat resistant and insoluble; that are resistant to scratching, scoring, decomposition, crazing, chipping, and distortion under normal use conditions; that do not impart chemicals, flavor, or odor to milk; and that maintain their original properties under conditions of repeated use.

(b) Product contact surfaces shall be easily cleanable and shall be free of breaks, open seams, cracks, or similar defects. Product contact surfaces shall not impart any odor, color, taste, or

adulterating substance to food. Product contact surfaces, other than product contact surfaces of approved C-I-P systems, shall be readily accessible for manual cleaning. Joints and fittings shall be of sanitary design and construction.

(3) LOCATION AND INSTALLATION OF DAIRY PROCESSING EQUIPMENT. (a) Dairy processing equipment shall be located and installed to prevent overcrowding and to prevent contamination of dairy products or product contact surfaces by splash, condensation, or manual contact.

(b) Dairy processing equipment that cannot be easily moved shall be installed in a manner that prevents liquid or debris from accumulating under or around the equipment.

(c) Dairy processing equipment shall be installed so that there is adequate clearance on all sides for cleaning and maintenance. This does not apply to that portion of a tank or container that is designed to protrude into or through a wall or the ceiling of a dairy plant.

(4) BULK STORAGE TANKS; VENTING. A tank used for the bulk storage of milk, whey, or liquid food products shall be equipped with an air filter to prevent contamination of tank contents, or shall be vented only to one of the following:

(a) A processing area.

(b) A tank gallery room that complies with processing area sanitation standards under this chapter.

(5) MEASURING DEVICES AND CONTROLS. (a) Every storage tank, freezer, and cold storage compartment used to hold milk or dairy products shall be equipped with a thermometer or other device that accurately indicates the temperature in the storage tank, freezer, or compartment.

(b) Each of the following bulk storage tanks shall be equipped with a 7-day temperature recording device that shows the temperature of dairy products stored in that bulk storage tank:

1. Every bulk storage tank used to store grade A milk or grade A dairy products for longer than 24 hours.

2. A silo tank installed after December 1, 1994.

(c) Instruments and controls used for measuring, regulating, and recording temperature, pH, acidity, water activity, or other conditions that control or prevent the growth of undesirable microorganisms in milk or dairy products shall be accurate, fully functional, and adequate for their intended use.

(6) LUBRICATION. Equipment shall be designed and constructed so that gear and bearing lubricants do not come in contact with milk or dairy products, ingredients, or product contact surfaces. Food grade lubricants shall be used if there is any chance that lubricants may come in contact with milk or dairy products, ingredients or product contact surfaces.

(7) CLEANING AND SANITIZING EQUIPMENT AND UTENSILS. (a) A dairy plant operator shall clean and sanitize product contact surfaces of equipment and utensils to keep them at all times in sanitary condition. Sanitizing methods shall comply with s. ATCP 65.34.

(b) Except as provided in pars. (c) to (f), a dairy plant operator shall at a minimum clean all product contact surfaces of equipment and utensils after each day's use, sanitize those surfaces before each day's use, and clean and sanitize those surfaces before any change in use that may cross-contaminate dairy products with major food allergens, as defined in s. ATCP 70.01 (19m), or other contaminants.

(c) A dairy plant operator shall clean and sanitize tanks used to store liquid dairy products whenever the dairy plant operator empties those tanks. Tanks used to store raw milk or grade A dairy products shall be emptied at least once every 72 hours.

(d) A dairy plant operator shall clean evaporators at the end of a continuous operation, not to exceed 44 hours.

(e) Paragraph (b) does not apply to any of the following equipment, provided that the dairy plant operator cleans and sanitizes the equipment according to manufacturer specifications or a cleaning and sanitizing process approved under par. (f), and complying with par. (a):

1. Drying equipment.

2. Cloth collector systems.

3. Dry product packaging equipment and storage containers.

4. Equipment used in brining, aging, curing, and dry product blending processes.

5. Reverse osmosis equipment that utilizes a permeate stream from a previously pasteurized product that has passed through a nanofiltration system achieving an efficiency of not more than 1,000 daltons.

6. Food contact surfaces of equipment used only to process foods or food ingredients with water activity not exceeding 0.85, or foods that are not potentially hazardous foods.

7. Food contact surfaces located downstream from the sterilization step in an aseptic processing and packaging system, provided that system sterility is maintained. If system sterility is not maintained, the surfaces shall be cleaned, sanitized, and sterilized before processing.

(f) The division may authorize an alternative cleaning and sanitizing schedule for continuously-operated equipment, in lieu of the schedule under par. (b), based on a proposal under par. (g). The division's authorization of a proposal for cleaning and sanitizing of equipment in contact with grade A dairy products is contingent upon consultation with, and acceptance of the proposal by, the US food and drug administration, and shall be valid for 5 years. The division's authorization may be renewed after a review requested in writing by the

dairy plant operator. A dairy plant operator shall adhere to the practices described in an approved proposal. A dairy plant operator may not alter practices described in an approved proposal without division approval. Division approval of a proposed changes for cleaning and sanitizing of equipment in contact with grade A dairy products is contingent upon consultation with, and acceptance of the changes by, the US food and drug administration, and shall be valid for 5 years.

(g) A dairy plant operator's proposal, under par. (f), shall include all of the following:

1. A complete description of the continuously-operated equipment covered by the proposal, including relevant design and sanitation features.

2. A complete description of the processing, handling, or storage operations for which the continuously-operated equipment is used. The description shall identify the types of dairy products involved, and the type and duration of continuous operations conducted.

3. A complete description of the cleaning and sanitizing procedure proposed by the dairy plant operator. The description shall include cleaning and sanitizing frequency, cleaning and sanitizing methods and materials, and other relevant process parameters such as time, temperature, and concentration. The description shall include relevant process diagrams and specifications.

4. A certification, by the dairy plant operator, that the proposed cleaning and sanitizing procedure complies with par. (a). The certification shall be based on a thorough hazard analysis and safety assessment by qualified personnel.

(h) A dairy plant operator shall keep records to document, on an ongoing basis, the operator's compliance with this subsection.

(8) STORING CLEAN EQUIPMENT AND UTENSILS. Clean equipment and utensils, unless stored in an approved sanitizing solution, shall be stored so that they drain dry. Utensils and equipment components disassembled for cleaning shall be stored above the floor in metal racks or other storage facilities which allow drainage. Clean equipment and utensils shall be protected from contamination prior to use.

(9) SINGLE-SERVICE UTENSILS. Single-service utensils shall be stored in the original containers in which they were received, or in other closed containers that will protect them from contamination until they are used. Single-service utensils shall not be reused.

(10) CLEANING COMPOUNDS, DETERGENTS, AND SANITIZERS; STORAGE AND LABELING. Cleaning compounds, detergents, and sanitizers used in a dairy plant shall be clearly labeled. When they are not being used, they shall be stored in designated areas and in an appropriate manner so that they do not contaminate dairy products, ingredients, equipment, or utensils.

ATCP 65.30 C-I-P systems. (1) CONSTRUCTION AND MAINTENANCE; GENERAL. C-I-P systems shall be designed, constructed, installed, and maintained in compliance with s. ATCP 65.28.

(2) CLEANING AND SANITIZING C-I-P SYSTEMS. (a) A dairy plant operator shall clean and sanitize all C-I-P systems in compliance with s. ATCP 65.28 (7). Surfaces that cannot be cleaned and sanitized by C-I-P procedures shall be cleaned and sanitized manually or by a clean-out-of-place mechanical process.

(b) A dairy plant operator shall keep records on the cleaning and sanitizing of all C-I-P systems. The records shall identify every C-I-P system that has been cleaned and sanitized, the date and time when each C-I-P system was cleaned and sanitized, the temperature of the cleaning and sanitizing solutions, and the length of time for which the C-I-P system was exposed to the

cleaning and sanitizing solutions. Records shall be made at the time the cleaning and sanitizing process is completed. Records shall be signed or initialed by a responsible person at the dairy plant. The division shall review the records as part of every routine inspection of the dairy plant.

(3) REVIEW OF PLANS. (a) Before installing a C-I-P system or adding equipment to any existing C-I-P system, the dairy plant operator shall submit to the division a plan for the installation or addition. The plan shall clearly describe each C-I-P circuit at a level of detail sufficient to permit review by the division within the time periods specified under this subsection.

(b) Plans for a C-I-P system, under par. (a), shall include the manufacturer's specifications for the system, including the manufacturer's specifications for operating, maintaining, cleaning, and sanitizing the system.

(c) Within 20 business days after any person files plans with the division under this subsection, the division shall return its comments or objections, if any, in writing.

ATCP 65.32 Dairy product packages. (1) GENERAL. (a) Dairy product packages shall be of sanitary design and construction. Packages shall be designed and constructed to protect packaged dairy products from reasonably foreseeable contaminants.

(b) Product contact surfaces of dairy product packages shall be smooth, nontoxic, noncorrosive, nonabsorbent, and durable under foreseeable use conditions. Product contact surfaces shall not impart any odor, color, taste, or adulterating substance to packaged dairy products.

(c) Dairy product packages shall be clean, sanitary, and free of any extraneous or deleterious substance. Dairy products shall not be sold or distributed in packages with a broken seal or that

are damaged to the extent that package contents could become adulterated as a result of the damage.

(d) Single-service packages shall be made of clean and sanitary materials, shall be protected from contamination prior to use, shall be handled in a sanitary manner, and shall be clean and sanitary at the time of use. Single service packages shall not be re-used.

(2) GRADE A DAIRY PRODUCT PACKAGES. (a) The residual bacteria count on product contact surfaces of grade A dairy product packages shall not exceed one per milliliter of capacity when the rinse test is used, or 50 per 8 square inches (one per square centimeter) when the swab test is used, in 3 out of 4 samples randomly taken and analyzed on a given day. Product contact surfaces shall be free of coliform bacteria as determined using a rinse test or a swab test.

(b) A grade A dairy product package shall be designed so that the product, the package pouring lip if any, and the package opening rim and area are protected from contamination during handling, storage, and initial opening. A grade A dairy product package shall be designed so that it cannot be opened without breaking the cap or closure seal, or leaving other readily apparent evidence that the package has been opened.

(c) Product contact surfaces of multi-use packages used for grade A milk or dairy products shall be constructed of one or more of the following materials unless the division specifically authorizes another material in writing:

1. Stainless steel of the Iron and Steel Institute 300 series or an equally corrosion resistant metal.

2. Heat resistant glass.

3. Plastic materials that maintain their original properties under repeated use conditions; that are fat resistant and insoluble; and that are resistant to scratching, scoring, decomposition, crazing, chipping, and distortion under normal use conditions.

(d) Product contact surfaces of multi-use packages used to contain grade A milk or dairy products shall have rounded corners, and shall be easily cleanable.

(e) Multi-use packages used to contain grade A milk or dairy products shall be effectively cleaned and sanitized before being reused. Cleaning and sanitizing procedures shall remove all extraneous matter and potential adulterants from each package. Sanitizing procedures shall comply with s. ATCP 65.34. If returnable glass bottles are sanitized in an automatic bottle washer by soaking those bottles in a caustic solution, the sanitizing procedure shall comply with sub. (3).

(f) Multi-use packages used to contain grade A milk or dairy products shall be inspected before they are reused. Inspection shall be adequate to detect extraneous materials, adulterants, and damage to product contact surfaces. Inspection shall be performed on surfaces lighted in compliance with s. ATCP 65.24 (5) (c).

(g) No multi-use plastic package may be reused for grade A milk or dairy products unless that package is tested for the presence of volatile organic compounds using method ASTM D 3530 or an equivalent method approved by the department before the package is filled. An automatic testing device, capable of detecting volatile organic compounds at levels of public health significance, shall be used to test each package. The testing device shall be installed in conjunction with the dairy product packaging apparatus so that no packages can be filled unless the testing device is operating properly, and so that packages containing unsatisfactory levels of volatile organic compounds are automatically made unusable. The dairy plant operator shall test

the system daily with a test solution consisting of 0.5 ppm petroleum distillate or another test solution approved in writing by the division.

Note: A copy of ASTM D 3530 may be obtained from ASTM International, P.O. Box C700, West Conshohocken, PA 19428-2959; 1-877-909-2786; www.astm.org.

(h) No plastic multi-use package may be used to contain grade A milk or dairy products unless all of the following requirements are met:

1. The package is identified to show the plant at which the package was manufactured, the date of manufacture, and the type and class of plastic material used. This information may be coded if the code is provided to the division.

2. The phrase "Use only for food" appears on the package.

3. The division has provided a written approval of a prototype of the package.

(i) Single-service packages used to contain grade A milk or dairy products shall be manufactured by a manufacturer listed in the "Certified Manufacturers of Single-Service Containers and Related Products" published online by the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services.

Note: Copies of "Certified Manufacturers of Single-Service Containers and Related Products" are available online at http://www.fda.gov/food/guidanceregulation/federalstatefoodprograms/ucm2007965.htm or from the Milk Safety Team, HFS-626, Food and Drug Administration, Public Health Service, United States Department of Health and Human Services, 5100 Paint Branch Parkway, College Park, MD 20740-3835.

(j) Packaged grade A milk and dairy products shall be conspicuously labeled as grade A milk or dairy products.

(3) AUTOMATIC BOTTLE WASHING. (a) Returnable glass bottles cleaned in an automatic bottle washer shall be sanitized while in the washer. Bottles cleaned in an automatic bottle washer may be sanitized by being soaked in a caustic solution. The causticity of the sanitizing solution shall be monitored and maintained at an appropriate level in relation to solution temperature and soaking time. Table 1 shows minimum causticity levels required for sanitizing solutions,

expressed in terms of percent concentration of sodium hydroxide (NaOH) in the sanitizing solution, based on applicable soaking times and temperatures.

(b) After being soaked in caustic solution under par. (a), bottles shall be rinsed with water that has been treated with heat or chemicals to destroy viable pathogenic or other harmful microorganisms that may be present in the rinse water.

Table 1
Minimum Causticity Levels Required for Sanitizing Solutions (% of NaOH), Based on Soaking Time and Temperature

Time in Minutes	F 170 C 77	160 71	150 66	140 60	130 54	120 49	110 43
3	0.57	0.86	1.28	1.91	2.86	4.27	6.39
5	0.43	0.64	0.96	1.43	2.16	3.22	4.80
7	0.36	0.53	0.80	1.19	1.78	2.66	3.98

(4) PACKAGING GRADE A DAIRY PRODUCTS. (a) Grade A dairy products shall be packaged in a sanitary manner at the dairy plant where they are pasteurized.

(b) Grade A dairy products shall be mechanically packaged using mechanical capping, closing, or sealing equipment approved by the division. When mechanical equipment for capping, closing, or sealing containers holding 3 gallons (12.8 liters) or more is not available, manual methods approved by the division may be used. Hand capping is otherwise prohibited.

(c) A drip deflector, designed and adjusted to deflect condensation away from open packages, shall be installed on each filler valve.

(d) Conveyors that feed packages to packaging machines shall have overhead shields to protect open packages from contamination.

(e) If a filled package is imperfectly sealed, the contents of that package shall be emptied into a sanitary container. The contents shall be discarded or shall be examined for physical adulterants, filtered if necessary, and repasteurized before being repackaged.

ATCP 65.34 Sanitizers and sanitizing methods. **(1)** SANITIZING METHODS. Cleaned product contact surfaces shall be sanitized by using any of the following methods:

(a) Complete and continuous exposure to clean water at a temperature of at least 170° F. (70° C.) for at least 5 minutes.

(b) Complete and continuous exposure to steam resulting in a food contact surface temperature of at least 170° F. (70° C.) for at least 15 minutes or resulting in a food contact surface temperature of at least 200° F. (93° C.) for at least 5 minutes.

(c) Complete and continuous exposure for at least 2 minutes to a sanitizing solution containing at least 50 ppm of free residual chlorine and having a pH not higher than 8.3, at a temperature not less than 75° F. (24° C.) or more than 110° F. (44° C.)

(d) Complete and continuous exposure for at least one minute to a sanitizing solution containing at least 12.5 ppm of available iodine and having a pH not higher than 5.0, at a temperature of not less than 75° F. (24° C.) or more than 110° F. (44° C.).

(e) Complete and continuous exposure to a caustic sanitizing solution according to s. ATCP 65.32 (3).

(f) Application of chemical sanitizers that comply with 21 CFR 178.1010, are registered with the U.S. environmental protection agency and applied according to manufacturer's instructions.

(g) Application of a chemical sanitizer or sanitizing method that has been shown to be as effective as the methods specified under pars. (a) to (f), and that the division has approved in writing.

(2) SANITIZERS; MAXIMUM CONCENTRATIONS. The use of a sanitizer shall leave no toxic residue on a product contact surface. Sanitizing solutions shall not exceed the maximum concentrations specified by the US food and drug administration, under 21 CFR 178.1010. A